

From: Johnson, Daniel I.
To: Microsoft ATR
Date: 1/3/02 6:11pm
Subject: Microsoft Settlement

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I recommend that the Court require in its remedy, in addition to the stipulations already provided (located at <http://www.usdoj.gov/atr/cases/f9400/9495.htm> and <http://www.usdoj.gov/atr/cases/f9500/9549.htm>), that:

- Microsoft be required to include compliance with relevant industry-standard, publicly available interconnectivity protocols and file formats in all software products, and provide these as the installed defaults. This does not forbid Microsoft from offering enhanced protocols as well, as options, but to foster competition, Microsoft must be required to make publicly available all technical details of "enhanced" or customized formats and protocols so that competitors can ensure interconnectivity.

- Microsoft be required to demonstrate compatibility of OS and software with these standards.

- Microsoft must not "extend" any independent formats, protocols or standards unilaterally.

- Microsoft be not permitted to engage in deceptive marketing practices misrepresenting the strengths of MS software and OS's and the weakness of competitors'.

Industry groups exist for many standards; these tend to be dominated by leading vendors. With regard to this Action, it is important that Microsoft and its client firms not be permitted to dominate standards groups' membership for a period of years.

Microsoft should be required, for a period of several years, to seek extensions of these standards only as part of industry consortia and that it and its client firms are forbidden dominate numerically.

I understand that these may seem to be too broad; it is not, for all "connectivity technology is "middleware." Details and rationale for why this action is appropriate to this case follow below. This recommendation is essentially an enhancement of Section III. E.

Respondent:

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Respondent's background:

Profession: general internal medicine since 1978
Experience relative to this case:

I've been a user of microcomputers since 1980; an "occasional" amateur software developer of word processing software 1982-1988; I have monitored the microcomputer and medical software arenas, as a consumer and an interested spectator, since 1983. I have experience with Apple computers and IBM PC's, and have used all versions of MS-DOS or PC-DOS through PC-DOS 7.0, Windows 3.10 through Windows XP, and Linux OS from Red Hat 5.0 through 7.2 (the current version). I am a knowledgeable non-professional with no vocational stake in software or operating systems.

Limitations:

I do not have the time to document the factual basis for the observations and conclusions I offer below, due to the demanding time constraints of my job as a physician and due to other personal commitments. I regret this, and would simply point out that this factual basis has been well documented within industry publications (often indirectly, however) and on the internet. None of my judgments

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are based on private information except perhaps some of my knowledge about excess costs to the health care industry due to the effects of Microsoft's monopoly on desktop operating systems and software.

Reason for responding:

I am concerned about the continued non-competitive situation in the microcomputer software industry because I have observed that Microsoft has used its market and public relations power destructively: to stifle competitive innovation, to indirectly hinder production and sales of needed custom-built software, to destroy, in several ways, many small companies whose expertise and software tools have not been replaced; the result has been to place inefficiency burdens on consumer businesses generally.

It places inefficiency burdens on consumer businesses in two ways: First, the severe security flaws in Windows operating systems and Microsoft's Outlook and Word software (which also have monopoly strength in the their markets) have slowed operation of the Internet, cause repeated system crashes that harm companies' businesses, and expose confidential personal data via software cracking.

Second, Microsoft is using its monopoly position to raise license fees and restrict license terms in ways that create harmful fiscal burdens on companies dependent on their OS and applications, burdens that would not exist if there were actually competition. This is creating financial inefficiency in the business sector generally, and in health care in particular -- because we are finding that software vendors, whose software has run well on non Microsoft platforms, are wholesale porting this software to Windows out of fear of being left outside the monopoly, resulting in uncontrollable increases in license fees and in hardware costs to users.

It is useful to contrast Microsoft's use of its monopoly markets and Intel's. Intel also enjoys monopoly power, but it has not been able prevent competition: first Cyrix and now AMD have been able to provide satisfactory alternatives to Intel (although some would argue that Intel as done its best to destroy both competitors, with significant although incomplete success).

The COMPETITIVE IMPACT STATEMENT says:

"On May 18, 1998, the United States filed a civil antitrust Complaint alleging that Microsoft Corporation ("Microsoft"), the world's largest supplier of computer software for personal computers, restrained competition in violation of Sections 1 and 2 of the Sherman Act, 15 U.S.C. ?? 1-2.The United States District Court for the District of Columbia, which found that Microsoft violated both Sections 1 and 2 of the Sherman Act. ... The Proposed Final Judgment will provide a prompt, certain and effective remedy for consumers by imposing injunctive relief to halt continuance and prevent recurrence of the violations of the Sherman Act by Microsoft that were upheld by the Court of Appeals and restore competitive conditions to the market."

I am convinced, based on my extended observation of the computer industry in this country, that the proposed Final Judgment will NOT provide a remedy that is effective, certain or prompt in restoring competition to the markets in which Microsoft has a monopoly position because it does not adequately take into account the manifold and pervasive means that have been used by Microsoft to achieve and maintain its monopoly position.

Rationale:

First, the remedies only address middleware (because the Complaint addresses middleware). Unfortunately for prospect of a remedy that is either "certain" or "effective" in restoring competition to the desktop

computer industry, middleware is only a small though important factor. It will not be possible to restore competition by addressing middleware alone.

Microsoft has successfully created for itself monopoly positions in

- operating systems for pc's
- email programs
- word processing programs
- spreadsheet programs
- browsers ("middleware")
- other less "significant" market areas

By "monopoly position" I mean that potential competitors can survive only by offering software that mimics the operations and functionality of Microsoft software; Microsoft continually changes their software's specifications and file formats to prevent this, and to make their own earlier versions incompatible with files created by new versions, forcing users to abandon the software both of competitors and of Microsoft in order to be able to interchange documents efficiently.

Microsoft does not have monopoly positions in

- server operating systems
- database software
- programming languages
- mail service
- internet protocols
- file/directory management
- customized software

This does not obviate Microsoft's monopoly position in all the other software areas that it already dominates.

Microsoft understands that the most important key to complete dominance of the software industry is by controlling "connectivity" -- sharing of documents, images, email, data, and directories. I will not expand this response with details; I will simply say that Microsoft is attempting to gain control of every area that it does not now dominate; the only area that seems relatively safe from monopolistic control right now is large databases. In every other area Microsoft has in place either technological programs or marketing programs that have some reasonable likelihood of controlling markets or technology or both.

As I have observed the evolution of the desktop-computer market during the last 21 years, it has been rare for Microsoft to gain competitive advantage by itself producing a functionally or technically superior product. MS-DOS was a badly designed operating system that happened to enjoy the imprimatur of IBM and the advantage of open computer architecture. Microsoft purchased the leading email software vendor; it waited for the word processing market to mature, then imitated the best of what was available from multiple competitors, and made Word the "best" by preventing competitors from learning how to make their own software work well with upcoming versions of Microsoft operating systems until Microsoft had completed its own work on Word, guaranteeing that the competition would always be "behind" on the dominant OS. It did the same thing with Excel, its spreadsheet program.

It was not able to do this with Netscape, and so it behaved in a variety of destructive ways that are well documented in the trial proceedings.

In general, I can identify four ways in which Microsoft has stifled competition:

- by purchasing its competition
- by inviting its competition to consider being purchased, examining their software technically, and then duplicating their software engineering while abandoning the proposed acquisition on one or another technicality.
- through a consistent pattern, since about 1990, of false and misleading advertising that inflates falsely the strengths of Microsoft

software and denying its faults or limitations while falsely slandering the strengths of competitive versions and emphasizing their faults and limitations.

- By claiming to adopt industry standards when offering software for which "connectivity" is important, but actually departing from those standards in the implementation, meaning that the output of these programs is not actually "portable" or exchangeable. (By "actually" I mean that it is not feasible within pragmatic limitations of time, effort, and money, not that it is conceptually impossible.)

I may be argued that these actions of Microsoft have not always been successful, but these instances of failure do not imply that Microsoft has failed to leverage their monopoly position; moreover, it has attempted to do so in every conceivable way.

The effects of this monopoly, as I've noted above, are financial inefficiency and operational inefficiency. Microsoft is now using its monopoly position to squeeze its business licensees (users) financially by raising license fees, requiring software upgrades, limiting user rights and otherwise restricting licenses.

In general, it is true that Microsoft operating systems, in comparison to other operating systems (Unix versions, Linux, OS/2, Macintosh, BeOS) are more prone to crashes, are more susceptible to security breakdowns and breaches, and do not run as efficiently on hardware (computers), entailing financial inefficiency for users who must purchase additional servers and spend more money on energy. My understanding is that in general, Microsoft operating systems require about twice the expenditure for electricity and for computers as alternatives. In addition, software vendors are burdened with the inefficiency of having to convert software to Windows because of the real threat to their businesses from not having Windows versions.

Microsoft will argue that to restrain its practices is to stifle technological improvement. It will point to specific instances in which its software performs better than other choices. But the existence of such specific instances of superiority does not imply that its software is generally superior in performance or in design; furthermore, even if this were true, Microsoft's practices effectively destroy competition and enhance its monopoly powers; this defect is more important to efficient commerce than the relatively small technical superiorities it points to.

Restoration of competition.

In my judgment it will not be possible, by any fiat a court is capable of issuing, to "promptly" restore competition to the market, as the Competitive Impact Statement proposes. At most, the court may be able to hinder Microsoft's destructive practices sufficiently to permit genuine competition to emerge by establishing a competitive environment.

Because the future of computing lies in interconnectivity of machines and exchange of data and communications, the only way to free our commercial society from monopolistic domination by Microsoft or any similar entity is to mandate that in all its operating systems and software applications, Microsoft supply, as defaults, file formats, directory handling, encryption methods, data-handling protocols, and other technology important in interconnectivity that are publicly available and conform to consensus industry standards.

Conclusion (reprise):

Thus I am recommending that the court require, in its remedy, that:

- Microsoft be required to include compliance with relevant industry-standard, publicly available interconnectivity protocols and

file formats with all software, and provide these as the installed defaults. This does not forbid Microsoft from offering enhanced protocols as well, as options, but to foster competition, Microsoft must be required to make publicly available all technical details of "enhanced" or customized formats and protocols so that competitors can ensure interconnectivity.

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